

VDSS Reports Portal

User Requirements Document

Draft

Project Name: **VDSS Reports Web Portal**

Prepared By: Erik Beecroft, Tom Little, UIA&R Workgroup

Date Document Prepared: **December 15, 2006**

Approved By: Obtain Live Signature /Enter Name of Approver

Approved Date: **Enter Approval Date**

Table of Contents

Overv	/iew	3
	oject Scope	
	Project Schedule	
2. U	ser Requirements	8
2.1	General Description of the New Process and Its Purpose	
2.2	Functionality	
2.3	Screens and Reports	12
2.4	User and human factors	
2.5	Security	12
2.6	Documentation	
2.7	Phased implementation schedule	12
3. C	omputer Operations and Technical Considerations	13
3.1		
3.2	Identify changes to interfaces with other systems or processes	
3.3	Scenarios, case examples, copies of relevant reports or documents	
4. Pı	ocessing Timeframes	15
5. Tr	aining Approach (See Training Plan Template)	16
	Training Assessment (See Training Plan Template)	

Overview

The purpose of this project is to develop a VDSS enterprise reports portal: a system that would provide a single user interface (via the local agency Web site) allowing users to access all static reports produced by all VDSS automated systems. The purpose of a reports portal is to make it much easier for local agency and home office staff to find and access the vast number of reports produced by the many VDSS systems. Improved access to information will help VSSS staff manage and improve their programs. A reports portal would increase the integration of information across VDSS systems and programs, supporting the "To Be" goal of a more integrated social services delivery system.

The current situation: many reports from many different systems

The BPR "As Is" report notes that VSSS has more than 80 automated systems. VDSS manages the major systems, most of which are designed to determine program eligibility and manage casework and program participation. Nearly all of these information systems produce regular reports, although they are designed to be transactional systems, not reporting systems.

VDSS also has *reporting* systems; that is, automated systems whose primary purpose is to produce reports. Three primary ways that VDSS reports are produced and distributed are:

- Dynamic reporting systems, such as the data warehouse and DOLPHIN reports;
- Static reporting systems, such as the Benefit Programs and CCD reports on the local agency web site; and
- Directly from the source transactional systems.

The data warehouse is VDSS' primary dynamic reporting system; that is, a reporting system that is connected to a database and produces reports "on the fly" by querying the database. The data warehouse may be the only VDSS reporting system that produces reports for multiple programs. DOLPHIN reports (https://portal.dss.virginia.gov/DolpReports/) also generates reports dynamically. An advantage of dynamic reporting systems is that they can provide more flexibility than static reports, but a disadvantage is the time and cost required to connect the reporting system to a database.

Static reporting systems, such as the Benefit Programs and CCD reports on the local agency web site (https://securelocal.dss.virginia.gov/reports/cc/idc/index.cgi), are repositories of previously-created reports, and are not directly connected to a database. Each system has a simple interface that allows users to select: a specific report; geographic unit (state, region, or FIPs); and time period (a particular month). An advantage of such static reporting systems is that they are less resource-intensive to develop because they do not need to be tied to a database; instead, they can

¹ First Data Government Solutions Inc. May 2005. <u>Deliverable 3—As Is Findings</u>. p. 44.

² Examples of major VDSS systems include ADAPT, APECS, CSA, ESPAS, FAAS, FS APPTRK, Interim Child Care, LASER, LETS, Med APPTRK, Medpend, OASIS, PA APPTRACK, Q5i, R&R25, VACIS, and VNIS.

³ An advantage of DOLPHIN reports over the data warehouse is that the former queries against the live DOLPHIN system, while data are refreshed only weekly in the data warehouse.

include reports from any source. Also, some users find it easier to access reports from static systems, because they generally involve fewer selections than a dynamic report. The disadvantage of such systems is that they are less flexible than dynamic reporting systems because they can provide only the "canned" reports that already exist in their repository. (Another disadvantage with the Benefit Programs and CCD reporting systems on the local agency web site is that response time is extremely slow.)

Nearly all VDSS transactional systems produce reports that can be accessed directly by logging in to the system (e.g., Mapper, ADAPT, LASER). An advantage of this approach is that such reports are usually run in real time against the transactional system and therefore provide the most up-to-date data. A disadvantage is that specialized knowledge is needed to access reports from each system. In addition, some systems have long wait times to generate reports (e.g., some LASER reports can take several hours to run).

The complication: reports are scattered and difficult to access

The main shortcoming of VDSS' current approach to reporting is that it is piecemeal. Thousands of reports are generated every month by VDSS automated systems, but each program and automated system makes reports available in different ways and different locations. Further, specific knowledge is required to access reports from some systems, and the knowledge requirements differ for each system (e.g., knowing how to access a report in LASER will not help you access a report in Mapper). Reports are not stored or accessible in any centralized way, which makes it impossible to search for a report across multiple systems; instead, users have to know where to look before they can find what they are looking for. Few users are aware of the vast volume of information produced regularly by VDSS systems, and many users are either unable to find the information they need or spend much more time looking than they should.

In a recent report, JLARC noted:

The State DSS collects tremendous amounts of data from local departments, but appears unable to convert it into useful information to support decision-making at the State and local levels. The State's segmented approach to data collection also hinders its ability to proactively support departments that may need help, because DSS cannot easily assess the overall situation at a local department.⁴

Although some of the information needed by local agencies and state staff is not available, the more common problem may be that the reports are available but are difficult to find and access.

How can VDSS improve access to its reports?

Given this situation, the key question is: What can VDSS do, with limited resources, to make it easier for users to find and access the information they need?

One solution is an *enterprise reports portal*: a reporting system with a simple user interface that allows users to find and access reports from all VDSS systems in the same way, without requiring any specialized knowledge of source systems, and without going to different locations.

⁴ JLARC. October 2005. Operation and Performance of Virginia's Social Services System. p. vii.

Users could access the reports portal on the local agency web site using a standard Web browser. LDAP authentication would enable individualized access to reports.

Users could locate reports by navigating through a tree structure of report categories, as in Windows Explorer, where the left-hand pane shows a tree structure of folders and the larger right-hand pane lists the reports in the selected folder. Ideally, several different tree structures would be available, each using a different taxonomy or classification system. For example, taxonomies might include source system such as ADAPT or OASIS, program area such as Food Stamps or CPS, or a date range. A user could then find a report by drilling down any of these taxonomies/hierarchies. If a user clicked on a specific report in the right pane, the report would open through a viewer. Ideally users would usually be able to find the report they are looking for in three clicks or less, and the report should open or download almost instantaneously.

Users would also be able to search for reports either by a report characteristic (such as title, source system, or date) or through full-text search (that is, searching for the existence of a specific text string anywhere within the report).

New reports would be loaded automatically as soon as they were produced in the source system, and the reports portal would automatically capture the report characteristics or metadata elements.

Attachment B provides graphic examples of reports portals.

The primary difference between the proposed reports portal and existing VDSS reporting systems is that the portal would include reports from many different automated systems, whereas most VDSS reporting systems are tied to a single system or program. The reports portal would also differ from existing reporting systems in providing powerful search capabilities. A complete portal would eliminate the need to know how to access reports in individual systems

What a reports portal would *not* do

The portal would not *create* reports. That is, it would not take raw data from source systems, and transform and format the data into a report. As additional reports are needed, they would be created and formatted outside the portal. Once created and formatted, they could be added to the portal.

The portal would include only static reports; the data warehouse would continue to fulfill the need for dynamic reporting. (But standard reports from the data warehouse could be regularly exported to the portal.)

The portal would likely not include text reports (such as reports produced for the General Assembly), only reports produced by automated systems.

A reports portal is not an all-inclusive *information* portal, although it could be an important component of an information portal.

Key benefits of a reports portal

The main benefit of a reports portal is that, by improving access to information, VSSS staff will be able to provide better quality services more cost-effectively to our customers. Other benefits of a VDSS reports portal include:

- Reducing staff time needed to find and obtain reports;
- Reducing hardware and software costs from maintaining many different report distribution systems;
- Reducing bandwidth and capacity demands on the e-mail system from distributing many large reports electronically;
- Reducing service requests (SRs) to develop new reports (because users will be better able to locate existing reports that meet their information needs);
- Reducing report printing and distribution costs (by making reports more accessible electronically, rather than automatically distributing hard copies); and
- Identifying reports that are duplicative or otherwise not needed, saving system costs (based on reviewing statistics on whether reports are accessed).

Phased implementation of a reports portal

Discussed in section 2.7.

1. Project Scope

The purpose of the project is to design, develop, and implement a VDSS Enterprise Reports Portal to be established on the Local Agency intranet web site for use by state and local VDSS staff. The reports portal will enable users to quickly locate and view or download any report generated by a VDSS automated system.

An ideal reports portal would include a centralized reports archive, with reports automatically exported from their source system into the archive as soon as they are produced. Such a centralized archive would enable users to search simultaneously across all reports, regardless of the source system. By reducing the human intervention needed, automatic exporting of reports into the archive will also ensure completeness of the archive and reduce staff time. The portal, however, would also enable report owners to add reports manually. The portal would also be able to capture and catalog reports that are available only as scanned images.

Every report would be catalogued with a variety of metadata elements (such as report name, category, keywords, source system, date), which could be used to search for relevant reports. The portal would also allow users to locate reports by navigating through a tree structure of report categories (as in Windows Explorer, where the left-hand pane shows a tree structure of folders and the larger right-hand pane lists the reports in the selected folder). Ideally, several different tree structures would be available, each using a different taxonomy or classification system. For example, taxonomies might include source system such as ADAPT or OASIS, program area such as Food Stamps or CPS, or a date range. A user could then find a report by drilling down any of these taxonomies/hierarchies.

The user requirements section of this document includes a list of the information systems whose reports should be included in the reports portal (see section 2.2). The reports portal may be most useful if it focuses only on "reports" as that term is commonly understood, and *excludes* the following types of documents:

- Calendars;
- Forms, templates, instructions;
- Handbooks, guidebooks, training manuals,
- Policy manuals;
- Brochures, pamphlets;
- Statutes, regulations, standards; and
- Links to Web pages of reports and statistics.

These types of documents might be included in a VDSS *information portal*, of which the reports portal would be one component.

Including reports produced by *local* agency systems or staff, not just reports generated by *state* systems and staff, would make the reports portal more useful to local agency staff. Including reports generated by local agencies would require addressing issues such as: what types of local agency reports; how would they be added to the portal; and who would have access to those reports. This aspect of the reports portal might be regarded as a medium- or long-term goal, rather than an immediate requirement.

Although the VDSS report portal would be available only to those with access to the local agency Intranet, some of the improvements could lead to changes that would make reports more accessible on VDSS' public web site.

A reports portal is similar in concept to document management (which often relies heavily on document imaging).

For an example of commercial off-the-shelf software that provides much of the functionality described in this section, see http://www.redwood.com/Report2web/Report2web.htm

1.1 Project Schedule

To be determined.

General Design and Project Approval: Enter date approval due from Business Owner

User Acceptance Testing: Enter date system is ready for User Testing

Implementation: <u>Enter date system in production</u>

2. User Requirements

The VDSS reports portal will provide a user-friendly interface through a Web browser that enables users to access any report generated by any VDSS system.

Specific functionality is described below.

2.1 General Description of the New Process and Its Purpose

See Section 1. above, Project Scope, for a general description of how the reports portal would work.

2.2 Functionality

Note: At this point, the functional requirements below are not listed in a particular order. Future versions of this document will prioritize the requirements below.

- Security: any individuals who have access to the local agency intranet
 (http://localagency.dss.virginia.gov/) would have access to the reports portal. However, access to particular reports could vary across users, depending on their role and authority. The LDAP authentication process would be used to determine which reports a user has access to. In other words, security would be similar to the security process in SPIDER.
- 2. Auto-capturing of reports: reports would be sent automatically from their source system (e.g., ADAPT, OASIS) to the reports portal archive. The portal would also enable report owners to manually add reports.
- 3. Search by report elements: reports would be catalogued by a number of metadata elements, enabling users to search by one or more of these elements. Metadata elements would include: name of reports; report nickname (if any); owner/created by; business entity; description of report; date of creation; date last modified; effective date, expiration date, report arguments (e.g. date range that filters the report), format of report (PDF, xml, Word, Excel, etc.), security (access restrictions), link (URL) to the actual report, category of report, scheduling or distribution information, etc. See Attachment A for a more complete list of metadata elements.
- 4. Full-text search: users would be able to locate reports by searching for text strings within reports.
- 5. Tree structure and taxonomies: reports would be organized according to a taxonomy that users would view as a hierarchical (expanding) tree structure, as in Windows Explorer. Multiple taxonomies would be implemented, allowing users to navigate through tree structures of folders defined by program name, source system, type of report (e.g., caseload and demographics; program evaluation; performance measures), and VDSS Division. As in Windows Explorer, the tree structure would display in a left-hand pane, and a larger right-hand pane would display lists of reports within a selected folder. The

list on the right hand pane would be sortable by clicking on one of the fields in the header (e.g., sort by title, date, source, size).

- 6. Personalized views: users should be able to customize their interface, including: choice of default tree structure. Users would also be able to access their most recently opened reports, and would be able to save reports to their own "favorites" folder.
- 7. Users can view reports without downloading them, or download the reports.
- 8. Partial list of systems whose reports would be included in a VDSS reports portal

Adult Services Adult Protective Services (ASAPS) Reports

Application Benefit Delivery Automation Project (ADAPT) Reports

Automated Program to Enforce Child Support (APECS) Reports

Benefit Programs Reports (Application Reports, Interim Reports, Medicaid Management

Reports, TANF Supplemental Reports, and TANF Financial Reports)

Child Care and Development Reports

Child Protective Services Reports

Child Protective Services Statistics

Comprehensive Services Act Statistics

Data Warehouse (DW) Reports (ADAPT Applications, ADAPT Cases, ADAPT Client,

ADAPT Clients By Benefit Service, CSA, EBT, IEVS, and Medicaid)

DCSE Facts and Statistics

DCSE Publications and Reports

DCSE Support Reports

DIS Status Reports

DMAS Statistical Record

Division of Finance Reports (DCSE Collection, DCSE Cost Benefit Analysis, FAAS Reports and RMS)

Division of Licensing Programs Help and Information Network (DOLPHIN) Reports

Employment Services System (ESPAS) Reports

Energy Assistance Program (EAP) Reports

Electronic Benefit Transfer Reports

Family Access to Medical Insurance Security Reports

Financial Accounting and Analysis System (FAAS) Reports

Fraud Management Reports

Food Stamp Application Tracking System (FS APPTRK) Reports

Food Stamp Claims Tracking (FSCT) Reports

Food Stamp Participation Reports

Legislative Studies, Reports and Regulatory Information

Local Automated System for Expenditure Reimbursements (LASER) Reports

Local Employee Tracking System (LETS) Reports Medicaid Application Tracking (Med APPTRAK) Reports

Office of Audit Services Reports

OASIS Reports (Adoption Reports, Child Family Services Review (CFSR) Reports, Child Protective Services (CPS) Reports, Foster Care (FC) Reports, Generic Reports and Resource Reports)

Office of Program Operations (Licensing) Reports

Public Assistance Application Tracking System (PA APPTRACK) Reports

Q5i – Food Stamp Quality Assurance Reports

Quality Assurance Reports

Refugee Statistics

R&R25 - Research and Reporting 25 Reports

VACIS Reports

VDSS Strategic Planning Performance Indicators

Virginia Child Welfare Outcome (VCWOR) Reports

Virginia Independence Program Report

Virginia Newcomer Information System (VNIS) Reports

VDSS Annual Statistical Report

Local DSS web-based reports

9. Other types of documents that are not reports and that might be included in an information portal, but not in the reports portal

Policy, Procedures, and Program Manuals

Energy Assistance (EA) Policy and Procedures

Food Stamps (FS) Policy and Procedures

Electronic Benefits Transfer (EBT) Policy and Procedures

General Relief (GR) Policy and Procedures

Medicaid (ME) Policy and Procedures

Quality Assurance (QA) Policy and Procedures

Temporary Assistance for Needy Families (TANF) Policy and Procedures

Child Care and Development (CCD) Policy and Procedures

Division of Child Support Enforcement (DCSE) program manual

Adult Services (AS) manual

Child Protective Services (CPS) manual

Generic Family Services policy manual

Adoption manual

Foster Care (FC) manual

Interstate Compact on the Placement of Children (ICPC) Policy and Procedures

Title IV-E Eligibility Manual

Finance Policy and Procedures

non-deviating local DSS personnel policy and procedures

state DSS personnel policy and procedures

Licensing Office of Program Operations (OPO) procedures

Fraud Reduction Elimination Effort (FREE) manual

News and information

DSS Public Affairs "News and Views"

Legislative Information

Regulatory information

Databases

Adult Day Care Centers (ADCC) Database

Assisted Living Facilities (ALF) Database

DOLPHIN Child Care Provider Database (Licensed and Unlicensed Child Care)

State Board of Social Services Minutes

Service Request (SR) Tracking Database SPIDeR Database State and Local Hospitalization Allocations and Balances Virginia Social Services System Performance Indicators

- 10. Include a counter that tracks usage of the portal, including counters for each report.
- 11. Include a help section with: tutorial, FAQs, glossary of terms, and "contact us" mechanism for questions or comments.
- 12. Include an announcements or "what's new" section describing new functionality or new reports.
- 13. In addition to reports produced by state systems, the portal would enable local agencies to include reports produced by their systems.

2.3 Screens and Reports

Attachment B shows screen shots of reports portal using a commercial off the shelf software application called Report2Web. These screen shots are included only to provide a visual example of how a reports portal would function.

2.4 User and human factors

We expect a wide variety of VSSS staff would use the reports portal. At the local agency level, users might range from line workers looking for a report about their caseload to local directors accessing a variety of program and financial reports. At the state level, users would include policy analysts, program managers, and senior management. Because the portal is intended to be a comprehensive source of all VDSS reports, any VSSS staff needing information about a VDSS program could use the system.

The broad range of users implies a broad range of computer skills. Consequently, some training would be needed on how to use the portal, but the goal is to make the portal as clear in purpose and user friendly as possible, to maximize its use and usefulness. The primary criterion for judging how well the reports portal is designed is how easy it is for users to find and access the reports they want.

2.5 Security

Any individuals who have access to the local agency intranet (http://localagency.dss.virginia.gov/) would have access to the reports portal. However, access to particular reports could vary across users, depending on their role and authority. The LDAP authentication process would be used to determine which reports a user has access to. In other words, security would be similar to the security process in SPIDER.

2.6 Documentation

The portal should be designed to minimize the need for documentation. The purpose of the portal, and navigation through the portal, should be as self-explanatory as possible. Some limited online help documentation, however, would likely be useful for some users.

2.7 Phased implementation schedule

Assuming that funds will not be available in the short term to either purchase off-the-shelf software or devote skilled staff to develop internally a fully functioning portal, some steps can be taken at low cost to meet some of the needs that a reports portal would address.

One option for a low-cost development approach is to adapt an existing report system for use by another program. The DOLPHIN reports system (https://portal.dss.virginia.gov/DolpReports/) has much of the important functionality required for a VDSS-wide reports portal. The system

was developed internally and the code can therefore be used to develop a similar reports Web site for another VDSS system, such as ADAPT, ESPAS, ASAPS, etc.

The DOLPHIN reports system includes the following desired functionality:

- An LDAP login process that enables individually-determined access to specific reports;
- A hierarchical tree structure of folders in the left pane;
- The ability to view and download reports as Excel or pdf files;
- The option for users to save certain reports as "favorite" reports, enabling quicker access;
- Reports are automatically sent from the source system to the DOLPHIN reports system; and
- The system tracks usage by user and report.

The DOLPHIN report system does *not* currently include some of the desired functionality:

- The right-hand pane does not show a list of reports in a folder.
- The DOLPHIN report system requires users to make several selections before showing a report
- Limited search capability

An alternative phased implementation approach:

• First create a Web page on the Intranet that serves as a gateway to all the different types of reports available on the Intranet

3. Computer Operations and Technical Considerations

This section describes how computer operations may be affected and how other systems may change, if this information is known to the business owner or business analyst. Where possible, indicate routine computer processes that must run (such as monthly runs or year-end clean-up) as well as any special computer batch activities. List any other systems that may be affected and what changes are expected.

3.1 Describe rules or considerations related to process

Describe any rules that apply to the requested process. For example, does it apply to all case types, open and closed cases, etc? Are there specific criteria for using the process?

Click here and begin typing.

3.2 Identify changes to interfaces with other systems or processes

Are there other systems or processes that are impacted by the request? Will other applications, systems, or computer batch processes change as a result of implementing this request?

Identify any technical training or implementation requirements that you may be aware of. Also describe how other systems, processes or areas were involved in development of this request (expert panel, meetings, review of draft, etc.).

Click here and begin typing.

3.3 Scenarios, case examples, copies of relevant reports or documents

Include specific scenarios or case examples to display how process should work. If copies of requested reports or documents are available, please attach.

Click here and begin typing.

4. Processing Timeframes

This section describes when and how often the new process should occur. The requested delivery date is also included in this section.

Identify when and how often the special computer runs should occur for various reports or special processing: monthly reporting, closing of inactive cases, and special reports that are generated as needed, etc. Also, identify if there are any specific retention requirements for the information; that is, how long must the information be saved for audit purposes either online or in a paper format. Make reference to the source of the retention time period.

Click here and begin typing.

5. Training Approach (See Training Plan Template)

This section identifies who will need training and who will be executing the training effort. Also list preliminary requirements: Web links to documentation, training manuals, training room schedules, etc. Also identify who will write the training materials, who will do the training, desired time tables, training room equipment/facilities needed, and travel requirements as appropriate. Also list preliminary requirements, such as Web links to documentation.

5.1 Training Assessment (See Training Plan Template)

Enter level of training detail that should be included in this plan. (For example, will training be done on the entire application or just major parts of it? Will specialized training be offered to limited groups of staff that use functionality that won't be available to most users?) Enter as much as is known during this phase.

Attachment A: Report Metadata

Attachment A. Repo			
T		Field	
Field Title	Brief Description	Requirement	Suggested Standardized Responses
Division	ex. Benefit Programs,		Appeals and Fair Hearings, Benefit Programs, Child Care
	Family Services, LDSS		and Development, Child Support Enforcement, Community
	(if non-VDSS)		and Volunteer Services, Family Services, Finance, Human
			Resource Management, Information Systems, Licensing
			Programs, Office of Audit Services, Office of Legislative
			and Regulatory Affairs, Public Affairs, Strategy
			Management and Research, Training Management, LDSS (if
		Mandatory	non-VDSS), Other
Program Area			TANF, Food Stamps, Foster Care, Child Protective Services,
			Child Support, Medicaid. Licensing, VIEW, Adult
			Protective Services, Community Services, Adoption,
			General Relief, Auxiliary Grant, General Services, QC,
			Comprehensive Services Act, Volunteerism, Financial,
			Management, Energy Assistance, Fraud, DFM, Human
			Resource Management, Refugee Resettlement, CSBG,
			Neighborhood Tax Credit Program, Volunteerism,
		Mandatory	Americorp, OTHER
Report Name	Formal Report Name	Mandatory	
Report Nickname	Name Commonly		
	Called	Optional	
Report Number		Optional	
Description	Brief or Detailed	Mandatory	
	ex. system, combination		MAPPER, APECS, ADAPT, OASIS, ESPAS, Child Day
	of data elements,		Care Interim System, Dolphin, Fuel/Cooling, LETS,
Source	external data source	Mandatory	Application Tracking System, Other

Attachment A: Report Metadata

Attachment At. Report			
		Field	
Field Title	Brief Description	Requirement	Suggested Standardized Responses
Presentation	Location- ex. Intranet,		
	Internet, in application,		Intranet, Internet, in application, hard copy only, CD-ROM,
	hard copy only	Mandatory	Data File, Other
Format	File Type- ex. Adobe,	Manuatory	Data File, Other
Tomat	Word, Excel, view-only		
	, ,	Mandatory	Access, Adobe, Word, Excel, view-only
Frequency	ex. monthly, quarterly,		Weekly, Semi-monthly, Monthly, Bi-Monthly, Quarterly,
	yearly, upon request	Mandatory	Annually, Ad-Hoc Requests, Other
	ex. static/ ad hoc or		•
Trans	snapshot/updated	Mandatany	
Туре	regularly if different from	Mandatory	
T. D 1 1 C 1			
Time Period Covered	frequency	Optional	
	ex. state, federal, local,		
Requirement	not applicable	Mandatory	
Audience	ex. worker (type of		
	worker), supervisor,		Client Level, Case Level, State, Local Agency, Child
	general public		Support - District Office, Regional Office, Licensing
			Regions, Child Support, Regions (East/West), Licensing,
		3.6 1 .	Regional Office, Service Delivery Area, Planning District,
A 11.1 TD / A		Mandatory	MSA, OTHER
Available To/ Access	Security Conditions/		
Conditions	Restrictions (ex.		
	specific system users,) A 1 .	
	LDAP)	Mandatory	
	ex. how long available		
Availability Period	on-line	Optional	
	ex. how long available		
Archival Period	C	Optional	
Archival Period	upon request	Optional	

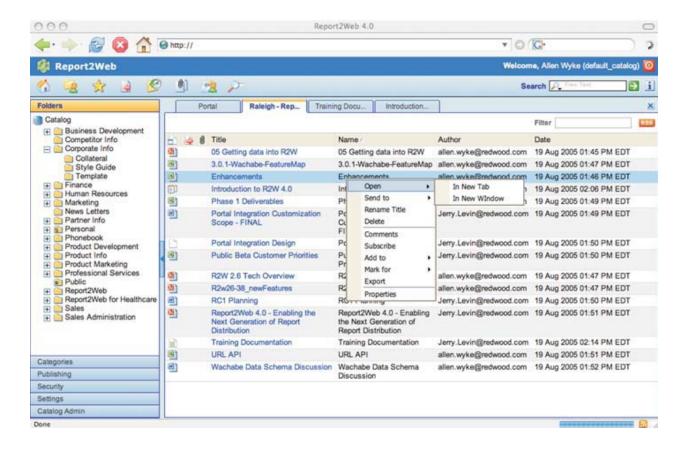
Attachment A: Report Metadata

Field Title	Brief Description	Field Requirement	Suggested Standardized Responses
Report Owner	Name, Title	Mandatory	
Report Owner Contact Information	Email and/or Telephone Number	Mandatory	
Metadata Update Date	Last Date of Update	Mandatory	
Key Word Search		Mandatory	

Attachment B Examples of Screen Shots for a Reports Portal

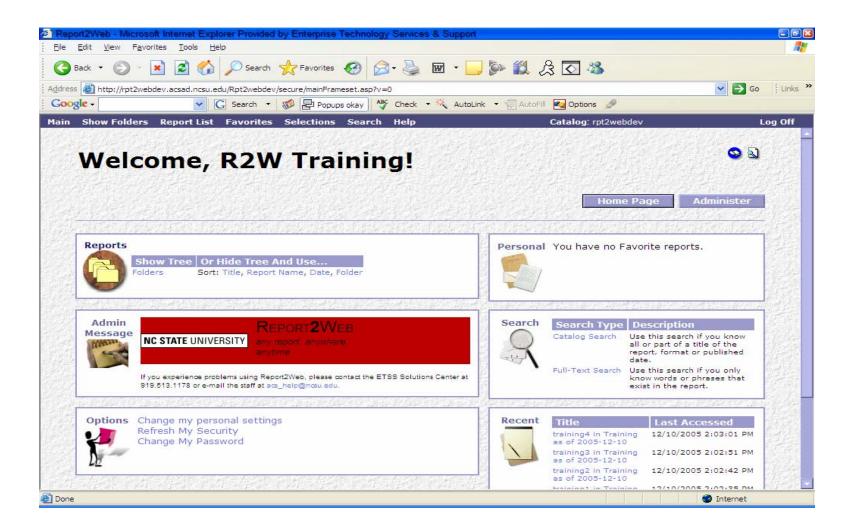
Screenshot from Report2Web

Note expanding folders in left pane; right pane shows list of folders in selected folder; list of folders in right pane can be sorted on any of the fields shown.



Example of Report2Web Portal in Use at N.C. State University

Note: This screen shows a user's home page, which is customizable. Note panes to: open up tree structure of folders listing reports; save favorite reports; search for reports (including full-text search); show recently opened reports.



Example of Report2Web Portal in Use at N.C. State University

Note: This screen shows the folders view. The left pane shows the hierarchical tree structure, and the right pane shows a view of the selected report.

